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RAW SEQUENCE LISTING
PATENT APPLICATION: **US/09/910,345B**

DATE: 12/12/2002
TIME: 15:21:50

Input Set : **A:\Nb201700.app**
Output Set: **N:\CRF4\12122002\I910345B.raw**

```
 4 <110> APPLICANT: SHEPARD, H. MICHAEL
 5        LACKEY, DAVID B.
 6        CATHERS, BRIAN E.
 7 .      SERGEEVA, MARIA V.
 9 <120> TITLE OF INVENTION: METHODS FOR IDENTIFYING THERAPEUTIC TARGETS FOR
10        TREATING INFECTIOUS DISEASE
12 <130> FILE REFERENCE: NB-2017.00
14 <140> CURRENT APPLICATION NUMBER: 09/910,345B
15 <141> CURRENT FILING DATE: 2001-07-20
17 <150> PRIOR APPLICATION NUMBER: 60/219,598
18 <151> PRIOR FILING DATE: 2000-07-20
20 <150> PRIOR APPLICATION NUMBER: 60/244,953
21 <151> PRIOR FILING DATE: 2000-11-01
23 <150> PRIOR APPLICATION NUMBER: 60/276,728
24 <151> PRIOR FILING DATE: 2001-03-16
26 <160> NUMBER OF SEQ ID NOS: 12
28 <170> SOFTWARE: PatentIn 2.1
30 <210> SEQ ID NO: 1
31 <211> LENGTH: 60
32 <212> TYPE: PRT
33 <213> ORGANISM: Pseudomonas aeruginosea
35 <220> FEATURE:
36 <221> NAME/KEY: NON_TER
37 <222> LOCATION: 1,60
39 <400> SEQUENCE: 1
40 Arg Asn Gly Gly Gln Ile Leu Val Glu Ala Leu Arg Arg Asn Ala Val
41  1               5                  10                  15
43 Asp Thr Val Tyr Cys Ile Pro Gly Glu Ser Tyr Leu Pro Val Leu Asp
44              20                  25                  30
46 Ala Leu Tyr Asp Thr Asp Gly Ile Arg Thr Val Val Thr Arg His Glu
47              35                  40                  45
49 Gly Ala Ala Ser Asn Met Ala Asp Ala Tyr Gly Lys
50      50                  55                  60
53 <210> SEQ ID NO: 2
54 <211> LENGTH: 21
55 <212> TYPE: PRT
56 <213> ORGANISM: Artificial Sequence
58 <220> FEATURE:
59 <223> OTHER INFORMATION: Description of Artifical Sequence: Sequence comparison
60        of SEQ ID NO: 1 to SEQ ID NO: 3
62 <220> FEATURE:
63 <221> NAME/KEY: NON_CONS
64 <222> LOCATION: 1-2,3-4,5-6,6-7,7-8,8-9,9-10,10-11,13-14,14-15,18-19
```

RAW SEQUENCE LISTING   DATE: 12/12/2002
PATENT APPLICATION: **US/09/910,345B**   TIME: 15:21:50

Input Set : **A:\Nb201700.app**
Output Set: **N:\CRF4\12122002\I910345B.raw**

```
 66 <400> SEQUENCE: 2
 67 Arg Gly Gly Leu Arg Val Gly Pro Leu Ala Gly Ile Arg Val Thr Arg
 68  1               5                   10                  15
 70 His Glu Ala Asp Ala
 71          20
 74 <210> SEQ ID NO: 3
 75 <211> LENGTH: 59
 76 <212> TYPE: PRT
 77 <213> ORGANISM: Homo sapiens
 79 <220> FEATURE:
 80 <221> NAME/KEY: NON_TER
 81 <222> LOCATION: 1,59
 83 <221> NAME/KEY: NON_CONS
 84 <222> LOCATION: (34)...(35)
```
W--> ` 86 <400> 3`
```
 87 Arg His Gly Gly Glu Asn Val Ala Ala Val Leu Arg Ala His Gly Val
 88  1               5                   10                  15
 90 Arg Phe Ile Phe Thr Leu Val Gly Gly His Ile Ser Pro Leu Leu Val
 91              20                  25                  30
 93 Ala Cys Glu Lys Leu Gly Ile Arg Val Val Asp Thr Arg His Glu Val
 94          35                  40                  45
 96 Thr Gly Val Phe Ala Ala Asp Ala Met Ala Arg
 97      50                  55
100 <210> SEQ ID NO: 4
101 <211> LENGTH: 60
102 <212> TYPE: PRT
103 <213> ORGANISM: Pseudomonas aeruginosea
105 <220> FEATURE:
106 <221> NAME/KEY: NON_TER
107 <222> LOCATION: 1,60
109 <400> SEQUENCE: 4
110 Leu Thr Gly Arg Pro Gly Ile Cys Phe Val Thr Arg Gly Pro Gly Ala
111  1               5                   10                  15
113 Thr His Ala Ala Asn Gly Val His Thr Ala Gln Gln Asp Ser Thr Pro
114              20                  25                  30
116 Met Ile Leu Phe Val Gly Gln Val Glu Ser Ala Phe Lys Gly Arg Glu
117          35                  40                  45
119 Ala Phe Gln Glu Val Asp Tyr Val Gln Met Phe Ser
120      50                  55                  60
123 <210> SEQ ID NO: 5
124 <211> LENGTH: 21
125 <212> TYPE: PRT
126 <213> ORGANISM: Artificial Sequence
128 <220> FEATURE:
129 <223> OTHER INFORMATION: Description of Artifical Sequence: Sequence comparison
130       of SEQ ID NO: 4 to SEQ ID NO: 6
132 <220> FEATURE:
133 <221> NAME/KEY: NON_CONS
134 <222> LOCATION: 1-2,2-3,3-4,5-6,8-9,9-10,10-11,12-13,13-14,14-15,15-16,16-17,
```

RAW SEQUENCE LISTING
PATENT APPLICATION: **US/09/910,345B**

DATE: 12/12/2002
TIME: 15:21:50

Input Set : **A:\Nb201700.app**
Output Set: **N:\CRF4\12122002\I910345B.raw**

```
135         17-18,18-19,20-21
137 <400> SEQUENCE: 5
138 Leu Gly Gly Val Thr Gly Pro Gly Thr Val Ala Gln Pro Leu Gly Arg
139  1               5                  10                 15
141 Ala Gln Val Asp Phe
142             20
145 <210> SEQ ID NO: 6
146 <211> LENGTH: 60
147 <212> TYPE: PRT
148 <213> ORGANISM: Homo sapiens
150 <220> FEATURE:
151 <221> NAME/KEY: NON_TER
152 <222> LOCATION: 1,60
154 <400> SEQUENCE: 6
155 Leu Ser Gly Thr Val Gly Val Ala Ala Val Thr Ala Gly Pro Gly Leu
156  1               5                  10                 15
158 Thr Asn Thr Val Thr Ala Val Lys Asn Ala Gln Met Ala Gln Ser Pro
159             20                  25                 30
161 Ile Leu Leu Leu Gly Gly Ala Ala Ser Thr Leu Leu Gln Asn Arg Gly
162             35                  40                 45
164 Ala Leu Gln Ala Val Asp Gln Leu Ser Leu Phe Arg
165      50                  55                  60
168 <210> SEQ ID NO: 7
169 <211> LENGTH: 55
170 <212> TYPE: PRT
171 <213> ORGANISM: Pseudomonas aeruginosea
173 <220> FEATURE:
174 <221> NAME/KEY: NON_TER
175 <222> LOCATION: 1,55
177 <400> SEQUENCE: 7
178 Gly Leu Ala Lys Trp Ala Val Glu Ile Asp Arg Ile Glu Arg Ile Pro
179  1               5                  10                 15
181 Glu Ile Val Gly Arg Ala Phe Ser Val Ala Thr Ser Gly Arg Pro Gly
182             20                  25                 30
184 Pro Val Val Val Ala Leu Pro Glu Glu Ile Leu Phe Gly Ser Ala Gln
185             35                  40                 45
187 Val Ala Asp Ala Pro Glu Pro
188      50                  55
191 <210> SEQ ID NO: 8
192 <211> LENGTH: 18
193 <212> TYPE: PRT
194 <213> ORGANISM: Artificial Sequence
196 <220> FEATURE:
197 <223> OTHER INFORMATION: Description of Artifical Sequence: Sequence comparison
198       of SEQ ID NO: 7 to SEQ ID NO: 9
200 <220> FEATURE:
201 <221> NAME/KEY: NON_CONS
202 <222> LOCATION: 1-2,2-3,3-4,4-5,5-6,6-7,8-9,12-13,13-14,15-16,16-17,17-18
204 <400> SEQUENCE: 8
```

RAW SEQUENCE LISTING
PATENT APPLICATION: **US/09/910,345B**

DATE: 12/12/2002
TIME: 15:21:50

Input Set : **A:\Nb201700.app**
Output Set: **N:\CRF4\12122002\I910345B.raw**

```
205 Leu Lys Val Arg Ile Ala Ser Gly Pro Gly Pro Val Val Leu Pro Leu
206  1               5                  10               15
208 Val Pro
211 <210> SEQ ID NO: 9
212 <211> LENGTH: 55
213 <212> TYPE: PRT
214 <213> ORGANISM: Homo sapiens
216 <220> FEATURE:
217 <221> NAME/KEY: NON_TER
218 <222> LOCATION: 1,55
220 <221> NAME/KEY: MOD_RES
221 <222> LOCATION: (22)
222 <223> OTHER INFORMATION: Any Amino Acid
```
W--> **224 <400> 9**
```
225 Pro Leu Cys Lys Phe Cys Val Ser Val Pro Arg Val Arg Asp Ile Val
226  1               5                  10               15
```
W--> **228 Pro Thr Leu Arg Ala Xaa Met Ala Ala Ala Gln Ser Gly Thr Pro Gly**
```
229              20              25               30
231 Pro Val Phe Val Glu Leu Pro Val Asp Val Leu Tyr Pro Phe Phe Met
232              35                  40              45
234 Val Gln Lys Glu Met Val Pro
235      50              55
238 <210> SEQ ID NO: 10
239 <211> LENGTH: 54
240 <212> TYPE: PRT
241 <213> ORGANISM: Pseudomonas aeruginosea
243 <220> FEATURE:
244 <221> NAME/KEY: NON_TER
245 <222> LOCATION: 1,54
247 <400> SEQUENCE: 10
248 Leu Leu Leu Glu Asn Glu Pro Gly Ala Leu Ser Arg Val Val Gly Leu
249  1               5                  10               15
251 Phe Ser Gln Arg Asn Tyr Asn Ile Glu Ser Leu Thr Val Ala Pro Thr
252              20                  25              30
254 Glu Asp Pro Thr Leu Ser Arg Leu Thr Leu Thr Thr Val Gly His Asp
255              35                  40              45
257 Glu Val Ile Glu Gln Ile
258      50
261 <210> SEQ ID NO: 11
262 <211> LENGTH: 18
263 <212> TYPE: PRT
```
C--> **264 <213> ORGANISM: Artificial Seqeunce**
```
266 <220> FEATURE:
267 <223> OTHER INFORMATION: Description of Artifical Sequence: Sequence comparison
268       of SEQ ID NO: 10 to SEQ ID NO: 12
270 <220> FEATURE:
271 <221> NAME/KEY: NON_CONS
272 <222> LOCATION: 3-4,5-6,6-7,8-9,9-10,10-11,12-13,13-14,15-16,17-18
274 <400> SEQUENCE: 11
```

RAW SEQUENCE LISTING   DATE: 12/12/2002
PATENT APPLICATION: **US/09/910,345B**   TIME: 15:21:50

Input Set : **A:\Nb201700.app**
Output Set: **N:\CRF4\12122002\I910345B.raw**

```
275 Leu Leu Leu Pro Gly Leu Arg Asn Asn Ala Asp Pro Leu Gly His Glu
276 1               5               10              15
278 Val Ile
281 <210> SEQ ID NO: 12
282 <211> LENGTH: 53
283 <212> TYPE: PRT
284 <213> ORGANISM: Homo sapiens
286 <220> FEATURE:
287 <221> NAME/KEY: NON_TER
288 <222> LOCATION: 1,53
290 <221> NAME/KEY: NON_CONS
291 <222> LOCATION: (42)..(43)
```
W--> 293 <400> 12
```
294 Leu Leu Leu Leu Ser Leu Pro Gly Leu Ala Ala Gly Ile Thr Ile Leu
295 1               5               10              15
297 Leu Thr Asp Arg Asn Leu Asn Thr Thr Phe Phe Asp Pro Ala Gly Gly
298             20              25              30
300 Gly Asp Pro Ile Leu Tyr Gln His Leu Phe Ile Phe Gly His Pro Glu
301             35              40              45
303 Val Tyr Asn Arg Ile
304         50
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 12/12/2002
PATENT APPLICATION: **US/09/910,345B**   TIME: 15:21:51

Input Set : **A:\Nb201700.app**
Output Set: **N:\CRF4\12122002\I910345B.raw**

<u>**Please Note:**</u>
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:9; Xaa Pos. 22

VERIFICATION SUMMARY
PATENT APPLICATION: **US/09/910,345B**

DATE: 12/12/2002
TIME: 15:21:51

Input Set : **A:\Nb201700.app**
Output Set: **N:\CRF4\12122002\I910345B.raw**

L:86 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:224 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:9
L:228 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:16
L:264 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:11
L:293 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:12